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Amendment Dated: June 20, 2005 Reply to Office Action of April 21, 2005

1. Cancelled.

- 2. (Currently Amended) The stent of claim 1, A braided modular stent comprising a first component and a second component, each component comprising an hourglass-shaped interface, each hourglass shaped interface comprising a reduced diameter section positioned between two sloped sections, each sloped section extending between the reduced diameter section and one of a plurality of nominal diameter sections, the reduced diameter section having a greater radial strength than the nominal diameter sections, wherein reduced diameter section of the hourglass-shaped interface has a greater braiding angle than the nominal diameter sections.
- 3. (Currently Amended) The stent of claim 1, A braided modular stent comprising a first component and a second component, each component comprising an hourglass-shaped interface, each hourglass shaped interface comprising a reduced diameter section positioned between two sloped sections, each sloped section extending between the reduced diameter section and one of a plurality of nominal diameter sections, the reduced diameter section having a greater radial strength than the nominal diameter sections, wherein the reduced diameter section of the hourglass-shaped interface comprises filaments having a first set of metallurgical properties different than a second set of metallurgical properties in the nominal diameter sections.
- 4. (Currently Amended) The stent of claim 1, A braided modular stent comprising a first component and a second component, each component comprising an hourglass-shaped interface, each hourglass shaped interface comprising a reduced diameter section positioned between two sloped sections, each sloped section extending between the reduced diameter section and one of a plurality of nominal diameter sections, the reduced diameter section having a greater radial strength than the nominal diameter sections, wherein the reduced diameter section of the hourglass-shaped interface comprises a plurality of first regions of braided filaments in which the filaments have a first cross-sectional area that is greater a second cross-sectional area in a plurality of second regions of braided filaments in the nominal diameter sections.
- 5. (Currently Amended) The stent of claim 1 claim 24, wherein the first component comprises a body having at least one integral leg stump depending therefrom, each

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leg stump comprising an hourglass-shaped interface, and the second component comprises a leg adapted to interface with the leg stump.

- 6. (Original) The stent of claim 5 comprising two integral leg stumps and two legs, each leg adapted to interface with one of the leg stumps.
- 7. (Currently Amended) The stent of claim 1, A braided modular stent comprising a first component and a second component, each component comprising an hourglass-shaped interface, each hourglass shaped interface comprising a reduced diameter section positioned between two sloped sections, each sloped section extending between the reduced diameter section and one of a plurality of nominal diameter sections, the reduced diameter section having a greater radial strength than the nominal diameter sections, wherein at least one of the first component or the second component has an end section having a wound architecture.
- 8. (Original) The stent of claim 7, wherein the wound architecture comprises a hexagonal cell architecture.
- 9. (Currently Amended) The stent of claim 1, A braided modular stent comprising a first component and a second component, each component comprising an hourglass-shaped interface, each hourglass shaped interface comprising a reduced diameter section positioned between two sloped sections, each sloped section extending between the reduced diameter section and one of a plurality of nominal diameter sections, the reduced diameter section having a greater radial strength than the nominal diameter sections, further comprising one or more circumferential elevations, each elevation comprising a first section of the stent having a first diameter that is greater than a second diameter of a second section of the stent distally adjacent the elevation and a third diameter of a third section of the stent proximally adjacent the elevation.
- 10. (Original) The stent of claim 9, wherein the one or more circumferential elevations is maintained by a plurality of filaments affixed between the second section and the third section.
- 11. (Original) The stent of claim 10, wherein each filament connects a first overlap of braided filaments in the first portion to a corresponding second overlap in the second portion.

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- 12. (Original) The stent of claim 11, wherein the filament comprises a suture, a staple, or a length of wire.
- of the first component or the second component further comprises a sealing region for providing an endoleak-resistant seal between the stent and a body lumen into which the stent is adapted to be installed.
- stent comprising a first component and a second component, each component comprising an hourglass-shaped interface, each hourglass shaped interface comprising a reduced diameter section positioned between two sloped sections, each sloped section extending between the reduced diameter section and one of a plurality of nominal diameter sections, the reduced diameter section having a greater radial strength than the nominal diameter sections, wherein at least one of the first component or the second component further comprises a sealing region for providing an endoleak-resistant seal between the stent and a body lumen into which the stent is adapted to be installed and the sealing region comprises a greater radial strength than portions of the stent adjacent to the sealing region.
- 15. (Original) The stent of claim 14, wherein the sealing region has a first braiding angle greater than a second braiding angle in the portions of the stent adjacent to the sealing region.
- 16. (Original) The stent of claim 14, wherein the sealing region has a first set of metallurgical properties different than a second set of metallurgical properties in the portions of the stent adjacent to the sealing region.
- 17. (Original) The stent of claim 16, wherein the first set of metallurgical properties are caused by a first annealing history and the second set of metallurgical properties are caused by a second annealing history.
- 18. (Original) The stent of claim 14 comprising a plurality of braided filaments, wherein the sealing region comprises first regions of the braided filaments in which the filaments have a first cross-sectional area that is greater a second cross-sectional area in second regions of the braided filaments in the portions of the stent adjacent to the sealing region.

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- 19. (Original) The stent of claim 14, wherein the sealing region has a first diameter greater than a second diameter in the portions of the stent adjacent to the sealing region.
- 20. (Original) The stent of claim 19, wherein the first diameter in the sealing ring is maintained by a plurality of filaments affixed between portions of the stent adjacent to the sealing region that hold the adjacent portions in an axially compressed configuration with respect to one another.
- 21. (Currently Amended) The stent of claim 1 claim 24, wherein the first component and the second component each further comprise a graft covering, lining, or combination thereof.
- 22. (Original) The stent of claim 13, wherein the sealing region has a ringlike geometry.
- 23. (Currently Amended) The stent of claim 1, A braided modular stent comprising a first component and a second component, each component comprising an hourglass-shaped interface, each hourglass shaped interface comprising a reduced diameter section positioned between two sloped sections, each sloped section extending between the reduced diameter section and one of a plurality of nominal diameter sections, the reduced diameter section having a greater radial strength than the nominal diameter sections, wherein the sealing region has a spherical geometry.
- 24. (Currently Amended) The stent of claim 1, A braided modular stent comprising a first component and a second component, each component comprising an hourglass-shaped interface, each hourglass shaped interface comprising a reduced diameter section positioned between two sloped sections, each sloped section extending between the reduced diameter section and one of a plurality of nominal diameter sections, the reduced diameter section having a greater radial strength than the nominal diameter sections, wherein the sloped sections have a radial strength greater than the nominal diameter sections.
- 25. (Currently Amended) The stent of claim 1, A braided modular stent comprising a first component and a second component, each component comprising an hourglass-shaped interface, each hourglass shaped interface comprising a reduced diameter section positioned between two sloped sections, each sloped section extending between the

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reduced diameter section and one of a plurality of nominal diameter sections, the reduced diameter section having a greater radial strength than the nominal diameter sections, wherein the sloped sections have a radial strength less than or equal to the nominal diameter sections.

26. (Original) A braided modular stent comprising:

a body having two integral leg stumps depending therefrom, an end section having a hexagonal cell wound architecture opposite the leg stumps, and a sealing ring adjacent the end section for providing an endoleak-resistant seal between the stent and a body lumen into which the stent is adapted to be installed, the sealing region having a greater radial strength than a portion of the stent adjacent to the sealing region; and

two legs, wherein each of said stumps and each of said legs has an hourglass-shaped interface for interlocking the legs to the leg stumps, each hourglass shaped interface comprising a reduced diameter section positioned between two sloped sections, each sloped section extending between the reduced diameter section and one of a plurality of nominal diameter sections, the reduced diameter section having a greater radial strength than the nominal diameter sections.

- 27. (Original) The braided modular stent of claim 26 wherein the sealing region comprises one or more of:
- (a) a first braiding angle greater than a second braiding angle in the portions of the stent adjacent to the sealing region;
- (b) a first set of metallurgical properties different than a second set of metallurgical properties in the portions of the stent adjacent to the sealing region;
- (c) a plurality of first regions of braided filaments in which the filaments have a first cross-sectional area that is greater a second cross-sectional area in a plurality of second regions of braided filaments in the portions of the stent adjacent to the sealing region; and
- (d) a first diameter greater than a second diameter in the portions of the stent adjacent to the sealing region.
- 28. (Original) The braided modular stent of claim 26 wherein the reduced diameter section of the hourglass-shaped interface comprises one or more of:

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(a) a first braiding angle greater than a second braiding angle in the nominal diameter sections;

- (b) a first set of metallurgical properties different than a second set of metallurgical properties in the nominal diameter sections; and
- (c) a plurality of first regions of braided filaments in which the filaments have a first cross-sectional area that is greater a second cross-sectional area in a plurality of second regions of braided filaments in the nominal diameter sections.
- 29. (Original) The stent of claim 26 wherein the body and the legs each further comprise a graft covering or lining.

30.-39. Cancelled.

- 40. (New) The stent of claim 25, wherein the first component comprises a body having at least one integral leg stump depending therefrom, each leg stump comprising an hourglass-shaped interface, and the second component comprises a leg adapted to interface with the leg stump.
- 41. (New) The stent of claim 40 comprising two integral leg stumps and two legs, each leg adapted to interface with one of the leg stumps.
- 42. (New) The stent of claim 25, wherein at least one of the first component or the second component further comprises a sealing region for providing an endoleak-resistant seal between the stent and a body lumen into which the stent is adapted to be installed.
- 43. (New) The stent of claim 42, wherein the sealing region has a ringlike geometry.
- 44. (New) The stent of claim 25, wherein the first component and the second component each further comprise a graft covering, lining, or combination thereof.